UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/657,719	09/08/2000	Kevin E. Mahaffy	AAI-002	2832

36822 7590 01/05/2006		EXAMINER
GORDON & JACOBSON, P.C. 60 LONG RIDGE ROAD SUITE 407 STAMFORD, CT 06902		CUFF, MICHAEL A

ART UNIT	PAPER NUMBER
3627	

DATE MAILED: 01/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)	
Office Action Summary	09/657,719	MAHAFFY ET AL.	
	Examiner	Art Unit	
	Michael Cuff	3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30,49,50 and 53-58* is/are pending in the application.

 4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30,49,50 and 53-58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

 a)☐ All b)☐ Some * c)☐ None of:

 1.☐ Certified copies of the priority documents have been received.

 2.☐ Certified copies of the priority documents have been received in Application No. _____.

 3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *20050408*.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Claim Objections

Claim 52 is dependent upon canceled claim 31. This appears to be a

typographical error and should be dependent upon claim 20.

Claims 13-14 and 16-18 recite, "said first computer". There is no antecedent

basis for this term.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 20, 22, 24, 25,27, 29, 30, 49, 50 and 52 are rejected under 35 U.S.C.

103(a) as being unpatentable over Shipman in view of Pickering and Edge work group.

Shipman shows all of the limitations of the claims except for specifying the use of

AI and parsing verbal instructions using grammatical syntax.

Shipman shows, figure 1, a system for effectively receiving voice input to a voice

recognition system. FIG. 1 shows a caller's telephone 10 (CIT, VoIP inherent)

connected by a telephone line through the telephone network 20 (inherently this

telephone network can connect a caller to the processing mechanism from around the

world, different building, or within the same building.) to a speech recognition system 40

at a given service establishment 30. Within the automated speech recognition system is

a recorder or other audio recording device 70 such as a disc drive or electronic memory. Recorder 70 can provide recorded voice information to a human attendant at console 140 via a headphone or speaker 120. The caller's spoken words are processed by a known speech recognizer 60.

FIG. 1 shows a caller's telephone 10 (CIT) connected by a telephone line through the telephone network 20 to a speech recognition system 40 at a given service establishment 30. Within the automated speech recognition system is a recorder or other audio recording device 70 such as a disc drive or electronic memory. Recorder 70 can provide recorded voice information to a human attendant at console 140 via a headphone or speaker 120. (Since the human attendant is linked by telephone, the same applies to the human attendant's location as explained above for the location of the CIT.)

If, at step 450, the speech recognizer 60 determines that it correctly recognizes the verbal request based upon the information repeated by the caller, the speech recognition system 40 will complete the task requested. In the event that the speech recognizer 60 determines it has again failed to recognize the verbal request, there is now no need to ask for an additional repeated request from the caller. Instead the information, which was previously recorded by speech record and playback device 70 is repeated at step 520 over headphone or speaker 120 so that the human attendant at console 140 is able to hear the repeated and recorded information. The recognizer 60 also displays on operator's console 160 proposed solutions to what the caller said.

If, at step 530, the human attendant 140 (human-controlled response system) is able to determine from hearing the recorded, repeated information what was said by the caller, the human attendant enters or corrects the information at the console 160. The attendant, for example, may use a keyboard to input information into console 160. The information is transmitted from console 160 to speech recognizer 60 (processing can be returned to the AI system during the transaction), which then completes the task.

Pickering teaches an end-of-utterance determination for voice processing system. Telephone network 110 is the input for a voice processing system 145. The voice processing system includes a natural language understanding unit (NLU) 245. From column 2, lines 22-23, "These units have knowledge of grammar and syntax, which allows them to parse a caller response, ..." The use of NLU provides a superior speech recognition system.

Based on the teaching of Pickering, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to upgrade Shipman's speech recognizer 60 to incorporate a NLU voice processing system as taught by Pickering in order to provide a superior speech recognition system.

Edge work Group article "One Voice Technologies Announces Strategic Relationship with IBM", dated October 18, 1999, shows One Voice's patent pending IVIT provides a layer of AI that understands advanced linguistic concepts such as topic, subject, and synonym. The integration of IBM's ViaVoice speech recognition engine and One Voice's upcoming IVAN application will forever change the way people interact with their computers and the Internet. "By adding a layer of AI to IBM's powerful speech

recognition technology, One Voice's IVIT enhances and simplifies computer and

Internet interaction."

Based on the teaching of Edge work group, it would have been obvious to one of

ordinary skill in the art, at the time the invention was made, to supplement Shipman's

speech recognizer 60 to incorporate a layer of AI in order to understand advanced

linguistic concepts such as topic, subject, and synonym. This would particularly

facilitate step 450, which checks for errors.

Claims 2-19, 21, 23, 26, 28, and 53-58 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Shipman in view of Pickering, Edge work group, Morris, and

Gerszberg et al.

Shipman shows all of the limitations of the claims except for specifying the use of

AI, parsing verbal instructions using grammatical syntax, details concerning items

included in the CIT, and the use of an animated character.

Shipman shows, figure 1, a system for effectively receiving voice input to a voice

recognition system. FIG. 1 shows a caller's telephone 10 (CIT, VoIP inherent)

connected by a telephone line through the telephone network 20 (inherently this

telephone network can connect a caller to the processing mechanism from around the

world, different building, or within the same building.) to a speech recognition system 40

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with their computers and the Internet. "By adding a layer of AI to IBM's powerful speech

recognition technology, One Voice's IVIT enhances and simplifies computer and

Internet interaction."

Based on the teaching of Edge work group, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to supplement Shipman's speech recognizer 60 to incorporate a layer of AI in order to understand advanced linguistic concepts such as topic, subject, and synonym. This would particularly facilitate step 450, which checks for errors.

Morris teaches application of personality models and interaction with synthetic characters in a computing system. This invention is related to the field of use of artificial intelligence. From column 1, lines 13-17, "Computer systems attempting to provide more "human-like" interfaces often employ such technologies as speech recognition and voice control as command input interfaces, and synthesized speech and animated characters as output interfaces." The benefit of using animated characters is that it will help increase the quality and the accuracy of the interface/interaction of the computer. (column 1, lines 38-40).

Based on the teaching of Morris, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify Shipman's telephone interface 50 to incorporate an animated character output in order to increase the quality and the accuracy of the interface/interaction of the computer.

Gerszberg et al. teaches, figure 3, a videophone 130, which may include a touch screen display 141 and soft keys 142 around the perimeter of the display 141. The videophone 130 may also include a handset 144 (which may be connected via a cord or wireless connection to the rest of the videophone and/or directly to the ISD), a keypad 150, a video camera 145, a credit card reader 146 (payment system), a smart card slot

147, a microphone 149, a motion and/or light detector 148, built-in speaker(s) 155, a

printer/scanner/facsimile 152, and/or external speakers 154 (for example, stereo

speakers). A keyboard 153 and/or a postage scale 151 may also be connected to the

videophone 130. Any or all of the above-mentioned items may be integrated with the

videophone unit itself or may be physically separate from the videophone unit. A block

diagram of the videophone unit is shown in FIG. 3B. Column 43, item 39, specifically

recites the use of the videophone for restaurant ordering. Advertising on the

videophone is mentioned frequently. The videophone provides one device that can

transparently provide speedy access to newly possible enhancement services (column

2, lines 39-40).

Based on the teaching of Gerszberg et al., it would have been obvious to one of

ordinary skill in the art, at the time the invention was made, to upgrade Shipman's caller

telephone 10 to incorporate a Gerszberg videophone in order to provides one device

that can transparently provide speedy access to newly possible enhancement services.

Response to Arguments

Applicant's arguments with respect to all claims have been considered but are

moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gilbert et al. and Jones et al. are provided as evidence that VoIP is common for a regular phone line.

Applicant's amendment, dated 4/8/05, necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cuff whose telephone number is (571) 272-6778. The examiner can normally be reached on 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on (571) 272-6771. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Cuff 12/12/05

Michael Cuff
December 12, 2005